

ABSTRACT

The present invention can code an I-picture that satisfies a predetermined condition using parameter information. When it is determined at step S1 that a picture type is the I-picture, it is determined at step S2 whether or not the phase of a macro block in previous coding agrees with that of the macro block of present coding. When the phases of the macro blocks agree with each other, it is determined at step S3 whether or not amount of generated code in a unit of picture in decoding  $\leq$  target amount of code  $\times \alpha$  is satisfied. When the condition is satisfied, it is determined at step S4 whether or not an image frame of previous coding is the same as that of previous coding. When the image frames are not the same, the information of a picture type, motion vector, and a quantized value included in the parameter information is reused, whereas when the image frames are the same, the stream data input to a decoder is output. When the above condition is not satisfied, the parameters are not reused. The present invention can be applied to a coder, a coding apparatus, an information recording apparatus, an information reproducing apparatus, or a transcoder.